

REMARKS

The Official Action mailed August 15, 2006 has been carefully considered. Reconsideration and allowance of the subject application, as amended, are respectfully requested.

Amendments to Specification

The specification has been amended to correct a minor informality. Specifically, the status of copending application Serial No. 10/266,536 has been updated. Applicants respectfully submit that no new matter has been entered.

Amendments to Claims

Independent claims 17 and 27 have been amended to replace the term “released” with “relinquished”. Additionally, independent claims 17 and 27 have been amended to recite, generally, that the pin is relinquished after the trimming operation such that the pin remains actively available to the IC to perform a second function. Support for this amendment may be found, for example, in paragraph [0028]. Accordingly, Applicants respectfully submit that no new matter has been added.

Claims 20, 21, and 24 have been amended to correct some minor informalities. Applicants respectfully submit that no new matter has been added.

Accordingly, claims 17-30 remain pending.

Objection to Specification

The Examiner has objected to the specification due to some informalities. Specifically, the Examiner has objected to the specification stating that the status of copending application Serial No. 10/266,536 needs to be updated. With this amendment, Applicants have amended the status of copending application Serial No. 10/266,536 to correct this informality. Applicant respectfully submits that no new matter has been entered. Accordingly, Applicants respectfully submit that the objection to the specification may now be withdrawn.

The Examiner has also objected to the specification under 37 C.F.R. § 1.71 asserting that the specification lacks an enabling description for claims 17 and 27 in reference to the term “pin

released” described in paragraph [0028] of the specification. Applicants respectfully disagree with this objection.

37 C.F.R. § 1.71 requires, *inter alia*, that the specification must be set forth in such particularity as to enable any person skilled in the pertinent art or science to make and use the invention without involving extensive experimentation. An applicant is ordinarily permitted to use his or her own terminology, as long as it can be understood by those skilled in the art.

Applicant respectfully submits that the term “releases” as used in paragraph [0028] of specification of the present application is readily understood by one of ordinary skill in the art. Specifically, paragraph [0028] of the specification states, *inter alia*,

The present invention is intended to provide after-package reference voltage (VREF) trimming circuitry and methodology which does not require additional pins, and further, which utilizes the internal register 12 only for the trimming procedure, and upon completion, *releases* the register for use by the IC. Additionally, the trim circuitry includes isolation circuitry *to release* the package pins utilized during testing, so that the package pins can be used by the IC as intended. (*Emphasis added.*)

Accordingly, it is clear from the above description that the term “release” is intended to mean “make available.” (*See, for example*, Encarta® World English Dictionary, North American Edition, release: 5. make something available.) In other words, once the after-package reference voltage trimming circuitry has completed the trimming the procedure, the after-package reference voltage trimming circuitry makes the pin available for use by the IC.

Accordingly, Applicants respectfully submit that the use of the term “release” in the specification complies with 37 C.F.R. § 1.71 and respectfully requests that the objection to the specification be withdrawn.

Objection to Claims

The Examiner has objected to claims 20-26 due to several informalities. With this amendment, Applicants have correct these informalities. Accordingly, Applicants respectfully submit that the objection to claims 20-26 may now be withdrawn.

Rejection under 35 U.S.C. § 112

The Examiner has rejected claims 17-30 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection.

In particular, the Examiner asserts that the term “pin released” as used in claims 17 and 27 renders the claims indefinite. For at least the reasons discussed above with respect to the Objection to the Specification, Applicants respectfully submit that the term “pin released” is definite. Nevertheless, Applicants have amended claims 17 and 27 to replace the term “released” with “relinquished”. Support for this amendment may be found, for example, in paragraph [0014]. Applicants further submit that this amendment does not alter the scope of the claims and is being made for reasons other than patentability.

Applicants additionally note that the Examiner has objected to claims all the pending claims (i.e., claims 17-30) in view of the term “pin released.” However, Applicants respectfully submit that independent claim 21 (as well as claims 22-26 that depend therefrom) does not recite this term. Accordingly, the rejection of claims 21-26 appears to be in error.

Accordingly, Applicants respectfully submit that the rejection of claims 17-30 has been overcome and should now be withdrawn.

Rejection under 35 U.S.C. § 102

The Examiner has rejected claims 17-30 under 35 U.S.C. § 102(e) as being anticipated by Kim et al. (U.S. Patent No. 6,184,720, hereinafter referred to as “Kim”). Applicants respectfully traverse this rejection. Claims 17-30 comprise three independent claims, namely, claims 17, 21, and 27.

Regarding independent claims 17 and 27, the Examiner asserts that the pins (TPO, TP1, ... TPn) of Kim are utilized by the internal voltage generating circuit 100 during a first time interval to perform a first function (corresponding to the test mode) and that the pins (TPO, TP1, ... TPn) are released

when the fuse circuit block 340 is activated when the test mode signal Ptest is non-active (or activated except for test mode), so that that it produces the positive output CUT and

negative output CUTB in accordance with the programmed state of the fuse, corresponding to the second time interval of the IC for a second function (during the normal mode of operation when Ptest is non-active).

At the outset, Applicants respectfully request further clarification of the Examiner's rejection should the Examiner maintain this rejection. For example, Applicants are unclear what "it" refers to in the Examiner's rejection noted above. Furthermore, Applicants are unclear what the Examiner asserts is the integrated circuit (IC) of Kim, what is the second function performed by the IC after trimming an element of the IC, and exactly which pin(s) are utilized by the IC to perform both the trimming by the after package trim circuit and the second function by the IC. Accordingly, further clarification is respectfully requested should the Examiner maintain the current rejection.

Nevertheless, Applicants have amended independent claims 17 and 27 to clarify that the pin (which is utilized by the after package trim circuit to trim an element of the IC) is relinquished after the trimming operation and remains actively available to the IC to perform a second function. Applicants respectfully submit that these amendments were made for reasons other than for overcoming a prior art rejection as discussed above. Applicants respectfully submit that Kim does not disclose or suggest utilizing one of the pins (TPO, TP1, ... TPn) to trim an element of an IC wherein the pin is *released* or *relinquished* by the after package trim circuit to be actively utilized by the IC to perform a second function as generally recited in independent claims 17 and 27. Should the Examiner disagree with Applicant's understanding of Kim, specific references to Kim and clarification of at least the questions addressed above are respectfully requested to aid Applicant.

Accordingly, Applicants respectfully submit that Kim does not disclose or suggest all of the limitations recited in independent claims 17 and 27. Claims 18-20 and 28-30 depend, directly or indirectly, from independent claims 17 and 27, respectively. Therefore, Applicants respectfully submit claims 18-20 and 28-30 are also allowable by virtue of their dependency from independent claims 17 and 27, respectively, in addition to their own patentable limitations.

Applicants further submit that Kim does not disclose or suggest all of the limitations recited in independent claim 21. In particular, independent claim 21 recites, *inter alia*,

said after package trim cell circuit array further responsive to an input signal representative of said trimmed reference signal within a predetermined range of a high precision reference signal to set said trim cell circuit array digital signal equal to a value of said test signal that results in said trimmed reference signal within said predetermined range of said high precision reference signal.

Applicants respectfully submit that Kim does not disclose or suggest these limitations. Moreover, Applicants respectfully submit that the Examiner has failed to provide any support in Kim for these limitations in the present Office Action.

As such, Applicants respectfully submit that Kim does not disclose or suggest all of the limitations recited in independent claim 21. Claims 22-26 depend, directly or indirectly, from independent claim 21. Therefore, Applicants respectfully submit claims 22-26 are also allowable by virtue of their dependency from independent claim 21, in addition to their own patentable limitations

Having dealt with all the objections raised by the Examiner, it is respectfully submitted that the present application, as amended, is in condition for allowance. Thus, early allowance is earnestly solicited.

If the Examiner desires personal contact for further disposition of this case, the Examiner is invited to call the undersigned Attorney at 603.668.6560.

In the event there are any fees due, please charge them to our Deposit Account No. 50-2121.

Respectfully submitted,
Shyr et al.

By their Representatives,

Grossman, Tucker, Perreault & Pfleger, PLLC
55 South Commercial Street
Manchester, NH 03101
603-668-6560

By: /Edmund P. Pfleger/
Edmund P. Pfleger
Reg. No. 41,252